Standard Data Elements for Permitting Information (Draft)
05/06/2003

The Environmental Data Standards Council (EDSC) chartered a Permitting Data Standard Action Team late in 2000 to identify and define the major areas of permitting information, and to develop a data standard that could be used for the exchange of permitting data among environmental agencies and other entities. This Action Team produced a standard that consisted of identification and tracking data believed to be universally applicable to most programs that have a permitting process or that are interested in permit related information. This standard contained the following groups of data elements or "data blocks," Permit Identification, Permitted Feature, Permit Administration, and Permit Contact. The EDSC approved that standard in December 2001.

It was the intent of the original Action Team to create a permitting standard that did not contain more detailed program-specific information, and that if the need arose, standardization of program-specific data would be accomplished via the development of program-specific standards or through the development of Data Exchange Templates between information exchange partners. The need subsequently arose and prior to developing program-specific permitting data standards, the EDSC charged a new action team (Permitting II) in September 2002 with the task of broadening the existing Permitting Data Standard to include any additional information that is useful to multiple programs in order to avoid capturing similar information in more than one standard.

The Permitting II Action Team has identified additional areas of permit related information that it believes to be of common interest to multiple programs. These additional areas include the data blocks, Facility/Feature Characteristics, Permit Condition, Reporting Condition, Monitoring Condition, and Control Methodology. These data blocks and a few additional data elements have been added to the original Permitting Data Standard to form the expanded draft data standard that follows.

As with the previous standard, the expanded draft Permitting Data Standard has a number of associations with existing data standards. Environmental business areas are typically inter-related (e.g., facilities have permits, agencies take enforcement actions against organizations who own facilities and have permits) and in order to express these relationships, data elements and in some cases data blocks from other standards will need to be incorporated to complete an exchange of information for a particular area. Rather than reinvent or duplicate the content of existing standards, the Team has identified cases where portions of other data standards should be used to complete associations among data elements within data blocks.

The original Permitting Data Standard contained a definition of "permit." The Permitting II Action Team identified some aspects of the original definition that it believes are distinct and should not be included within a single definition. A revised definition follows. A "permit" is an authorization, license, or control document used to implement the requirements of a regulation. A permit may be issued to an individual or an organization and typically specifies pollutant limits or operating procedures. A permit may be uniquely identified by the combination of three data elements: 1) Permit Number/Identifier, 2) Name of Issuing Organization, and 3) Permit Type.

The following table contains the data blocks and data elements that comprise the expanded Draft Permitting Data Standard and does not represent a mandatory list of required elements for data exchange between EPA and its partners.

Draft Permitting Data Standard				
Data Element Name		**Data Element Definition**	**Notes**	**Format**
Permit Identification *Definition*: Identification information about the permit and the organization responsible for issuing or granting the permit. *Relationships:* A permit may be related to a facility (Facility Identification Data Standard). • A permittee may be associated with Facility Site Name, Facility Owner/Operator (a permissible value for Affiliation Type), Facility Registry Identifier, and State Facility Identifier. • A permit name may be associated with Environmental Interest Type. A facility may have one or more permits. A permit may address one or more regulated substances (Chemical Identification and/or Biological Taxonomy Data Standards). A permit may be related to another permit (e.g., an individual permitted facility may be related to an overarching General Permit). A permit may have one or more permitted features. A permit may be associated with one or more data elements of administrative information (multiple dates may create history). A permit may be associated with one or more permitting contacts. A number of contact related data elements exist in the Contact Data Standard and should be used as needed to identify entities and their affiliation such as; • Permittee • Name of Issuing Organization • Organization Type • Permitted Entity Contact Full Name • Permitted Entity Contact information (e.g., mailing address, phone number, etc.,)				
1	Permit Name	The name assigned to the permit by a permit issuing/granting organization to identify a permit or permit application.	(e.g., Dupont Chamberworks RCRA Treatment Permit). This data element may be associated to Environmental Interest Type in the USEPA Facility Registry System.	Alphanumeric (120)
2	Permit Number/Identifier	The alphanumeric identifier assigned to the permit by a permit issuing/granting organization to identify a permit or permit application.	(e.g., 51432)	Alphanumeric (30)
3	Other Permit Number/Identifier	Other alphanumeric identifiers used to identify a permit or permit application.		Alphanumeric (30)

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Data Element Name		**Data Element Definition**	**Notes**	**Format**
4	Other Permit Number/Identifier Context	A brief description of the other permit number/identifier context	(e.g., authorization ID used by PA DEP for tracking)	Alphanumeric (100)
5	Program Name	The name of the program/jurisdictional authority under which a permit is issued or granted.	The following are representative samples of permissible values: Air Quality Water Quality/NPDES Hazardous Waste/RCRA Underground Injection Control (UIC) Solid Waste Mining	Alphanumeric (40)
6	Permit Type	The type of permit issued or granted to a regulated entity.	The following is a representative sample of permissible values for Federal and State environmental permit programs. Permissible values are specific to program name. NPDES-Major nonmunicipal - individual NPDES-Minor nonmunicipal - individual NPDES-Major municipal - individual NPDES-Minor municipal - individual NPDES-General permit NPDES-General permit coverage - individual facility, major NPDES-General permit coverage - individual facility, minor NPDES-No exposure Certification RCRA-Part A RCRA-Part B AIR-General AIR-Title IV (acid rain) AIR-Title V AIR-Synthetic Minor AIR-Minor UIC-Construction	Alphanumeric (120)

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Data Element Name		**Data Element Definition**	**Notes**	**Format**
			UIC-Operation SOLID WASTE-Municipal Land Fill SOLID WASTE-Industrial Land Fill SOLID WASTE-Transfer Station SOLID WASTE-Land Application MINING-Coal Mining Surface Mining Permit MINING-Coal Mining Operators License MINING-Industrial Minerals Mining Activity Permit	
Permitted Feature *Definition*: Information about the permitted feature of a permit. A permitted feature is a unit, physical structure, feature, or process described in a permit. *Relationships*: A permitted feature may be associated with one or more data elements of administrative information. A permitted feature identifier may be associated with one of more permitted feature types. A permitted feature may address one or more regulated substances (Chemical Identification and/or Biological Taxonomy Data Standards.)				
7	Permitted Feature Identifier	The alphanumeric identifier or name assigned by a permit issuing organization to identify a permitted unit, feature, or process.	(e.g., Smith Furnace AV). This data element may be used multiple times to describe multiple features. Each feature identifier/ name should be associated to at least one feature type (See item #12).	Alphanumeric (40)
8	Permitted Feature Type	The type of permitted unit, feature, or process represented by an identifier.	Permissible values may include: External outfall Internal outfall Lagoon Land application site Incinerator Stack Pumping station Monitoring well Perc pond Landfill Surface impoundment Waste pile	Alphanumeric (40)

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Data Element Name		**Data Element Definition**	**Notes**	**Format**
			Tank Container Boiler and industrial furnace	
9	Permitted Feature Operating Status	The name of the category describing the operating status of a permitted unit.	Permissible values may include: Proposed Under construction Constructed, but not yet active Active/Operating Inactive Clean/Closed Closed in place Not constructed Operating Operating, but not discharging Not operating Seasonal shut down Temporary shut down	Alphanumeric (40)
10	Permitted Feature Start Date	The calendar date that the operating status of a permitted feature takes effect.		D(8) YYYYMMDD Source: Date DS
11	Permitted Feature End Date	The calendar date that the operating status of a permitted feature is no longer in effect.		D(8) YYYYMMDD Source: Date DS
Permit Administration *Definition*: Administrative information about the permit.				
12	Permit/Permitted Feature Administrative or Legal Status	The administrative or legal status of a permit or permitted feature.	Permissible values may include: Pending Appealed Denied Active Inactive Expired Extended Withdrawn Revoked Not required	Alphanumeric (20)
13	Permit Application Completion Date	The calendar date that a permit application was deemed to be complete.		D(8) YYYYMMDD Source: Date DS

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Data Element Name		**Data Element Definition**	**Notes**	**Format**
14	Permit Issue Date	The calendar date that a permit was issued.		D(8) YYYYMMDD Source: Date DS
15	Permit Effective Date	The calendar date that a permit becomes effective.		D(8) YYYYMMDD Source: Date DS
16	Permit Expiration Date	The calendar date that a permit expires.		D(8) YYYYMMDD Source: Date DS
17	Permit Revocation Date	The calendar date that a permit will be or was revoked.		D(8) YYYYMMDD Source: Date DS
18	Permit Termination Date	The calendar date that a permit will be or was terminated or surrendered.		D(8) YYYYMMDD Source: Date DS
Facility/Feature Characteristic *Definition*: The description of the size, scope, and complexity of a specific feature or facility. *Relationships*: A facility/feature characteristic may be associated with a Permit Number/Identifier or a Permitted Feature Identifier. *Note*: The data elements in this group can be used at the facility level as well as the feature level. Collectively these data elements can be used to describe the quantity that a permitted facility or feature (feature may be a unit or process) is designed to, permitted to, or can actually manage or produce. It also can characterize the flow, production amount, or other specifications about the facility's or feature's designed or actual characteristics or functions.				
19	Facility/Feature Characteristic Name	The descriptive name of the item that the facility/feature is designed to or actually accommodates, or produces.	Example values may include: Sewage Pollutant Chemical Biological Product Nylon Heat Input	Alphanumeric (40)
20	Facility/Feature Characteristic Text	The description of the capability or function that the facility/feature is designed to or actually accommodates, or produces.	(e.g., removal of pollutants from municipal wastewater)	Alphanumeric (120)
21	Facility/Feature Characteristic Measure Name	The name that describes what the feature characteristic represents.	e.g., of permissible values include: Potential Flow Actual Flow Design Capacity Production Amount	Alphanumeric (40)

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Data Element Name		**Data Element Definition**	**Notes**	**Format**
			Actual Capacity	
22	Facility/Feature Characteristic Measure Value	The numeric value that quantifies the feature characteristic.	(e.g., the number representing the quantity, rate or any other measurement type)	Numeric (8) Source: PCS: Measurement/ Violation Quantity Maximum
23	Facility/Feature Characteristic Measure Unit of Measure Name	The name of the determinate quantity for a standard of measurement used for measuring the dimension, capacity, or amount of the feature characteristic.	e.g., of permissible values include: - µg/L -Micrograms per liter - pCi/L - Pico-Curies per liter - CFU/ml - Colony forming units per milliliter	Alphanumeric (10) Source: RWQRCMA DS: Result Value Unit of Measure
24	Facility/Feature Characteristic Statistical Basis Name	The name of the statistical basis describing how the feature characteristic measure value was derived.	e.g., of permissible values include: Maximum Average	Alphanumeric (30)
Control Methodology *Definition*: A process and/or tools to manage storage, disposal, treatment, and other handling protocols designed for and/or used. *Relationships*: A control methodology may be related to one or more facilities, features, or entities.				
25	Methodology Type	The type of process and/or tool designed or used to manage storage, disposal, treatment, and other handling protocols.	e.g., of permissible values include: Incineration Disposal	Alphanumeric (30)
26	Methodology Description	The text that describes the process and/or tools that manage storage, disposal, treatment, and other handling protocols designed for and/or used.	This field allows the user to provide extensive detail to describe the methodology used beyond that provided by Methodology Type (e.g., equipment manufacturer, make, model, location description, etc.,)	Alphanumeric (120)
Permit Condition *Definition*: The requirement applied to the facility, entity, or feature. Conditions could be limit/numeric, schedule/date, or descriptive requirements. *Relationships*: A permit condition is associated with a Permit Number/Identifier. Multiple permit conditions may be associated with a permit. A permit condition may be associated with one or more facilities, entities, or features. Multiple permit conditions may be placed on a facility, entity, or feature. *Note*: Reference the Reporting Water Quality Results for Chemical and Microbiological Analytes Data Standard. For chemicals, biological organisms, physical parameters, or other entities, the following items may define the object of the condition: Analyte Name, Analyte Name Context Name, Analyte Identifier/Number, and Analyte Identifier Context Name.				

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Data Element Name		**Data Element Definition**	**Notes**	**Format**
27	Condition Identifier	The reference to a section of a permit that identifies the condition within a specific permit.		Alphanumeric (20)
28	Basis of Condition	The regulatory or technical framework used to define the requirement.	(e.g., statute name, citation, water-quality guidelines, etc.)	Alphanumeric (100) Source: E/C DS: Federal Statute Violated
29	Condition Status Name	The name of the category describing the status of the condition.	Permissible values may include: Initial Modified Revoked	Alphanumeric (20)
30	Condition Start Date	The date on which a condition begins being in effect.		D(8) YYYYMMDD Source: Date DS
31	Condition End Date	The date on which a condition ends being in effect.		D(8) YYYYMMDD Source: Date DS
32	Text Condition	The language that explains the requirement placed on the responsible party.	(e.g., "Ensure fence surrounds storm water pond.")	Alphanumeric (120)
33	Condition Trigger Text	The text that describes an event or circumstance that activates a requirement.	(e.g., seasonal limit, ozone exceedance)	Alphanumeric (120)
34	Numeric Condition Quantity	The numeric value that represents the limitation being placed on a parameter for a feature.		Numeric (8) Source: PCS: Measurement/ Violation Quantity Maximum
35	Numeric Condition Unit of Measure Name	The name of the determinate quantity for a standard of measurement used for measuring dimension, capacity, or amount of the numeric condition.	e.g., of permissible values include: - μg/L -Micrograms per liter - pCi/L - Pico-Curies per liter - CFU/ml - Colony forming units per milliliter	Alphanumeric (10) Source: RWQRCMA DS: Result Value Unit of Measure
36	Numeric Condition Statistical Basis Name	The name of the statistical basis specified in a limit/numeric condition.	e.g., of permissible values include: Average Maximum	Alphanumeric (30)

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	Data Element Name	**Data Element Definition**	**Notes**	**Format**
37	Numeric Condition Qualifier	The mathematical operator used to qualify the limit.	e.g., of permissible values include: < > =	Alphanumeric (1)
Reporting Condition *Definition*: Administrative information associated with submission or reporting requirements. *Relationships*: A reporting condition may be associated with one or more permit conditions.				
38	Report Recipient Name	The name of the entity or entities directed by the permit or regulations to receive the report.		Alphanumeric (60) Source: Facility DS & Contact DS: Organization Formal Name
39	Reporting Frequency	The frequency with which the report is required to be submitted to the report recipient.	e.g., of permissible values include: Annually Quarterly Monthly Daily	Alphanumeric (30)
40	Report Due Date	The date that the report is due to the report recipient.		D(8) YYYYMMDD Source: Date DS
41	Report Received Date	The actual date the report was received by the report recipient.		D(8) YYYYMMDD Source: Date DS
42	Report Identifier	The unique tracking number or name assigned by a system or program that identifies the report.	e.g., of permissible values include: 4th Quarterly Report 20030714A	Alphanumeric (30)
Monitoring Condition *Definition*: Administrative information that describes the monitoring requirements. *Relationships*: A monitoring condition may be associated with one or more permit conditions. *Note*: This data block is intended to capture monitoring activities required by a permit such as a description of the monitoring site, its location, monitoring frequency, the method used to collect a sample, or the reference number of the analytical method used. Where they exist, data elements from other final data standards are referenced for use as needed. The following data elements from the Latitude/Longitude Data Standard may be used to identify the specific geographical representation of the monitoring location (e.g., point, line, or area): Latitude Measure, Longitude Measure, Horizontal Accuracy Measure, Source Map Scale Number, Horizontal Collection Method Text or Code, Reference Point Text or Code, Horizontal Reference Datum Name or Code.				

Draft Permitting Data Standard				
	Data Element Name	**Data Element Definition**	**Notes**	**Format**
The standard data element Sample Collection Method Text from the Reporting Water Quality Results for Chemical and Microbiological Analytes Data Standard may be used to identify the method used to collect the sample as prescribed by a permit. The standard data element Analytical Method Number from the Reporting Water Quality Results for Chemical and Microbiological Analytes Data Standard may be used to identify the reference method number of the analytical method used.				
43	Monitoring Site Description	Text that describes the monitoring site with respect to a feature.	(e.g., stack 12, scrubber A2, manhole, downstream from discharge pipe)	Alphanumeric (120)
44	Monitoring Frequency	The required frequency with which monitoring is to be conducted at the site or location.	e.g., of permissible values include: Daily Hourly Monthly Quarterly Semi-annually Yearly Bi-annual Tri-annual No reporting requirements	Alphanumeric (25) Source: AIRS/AFS: Reporting Requirements to Region

Sources used for data element data types and lengths:

- AIRS/AQS: Aerometric Information Retrieval System (AIRS)/Air Quality Subsystem (AQS)
- Contact DS: Environmental Data Standards Council (EDSC) Contact Information Data Standard
- Date DS: EDSC Date Data Standard
- E/C DS: EDSC Enforcement/Compliance Data Standard
- PCS: Permit Compliance System
- Facility DS: EDSC Facility Identification Data Standard
- RWQRCMA DS: EDSC Reporting Water Quality Results for Chemical and Microbiological Analytes Data Standard